

Fact Sheet for General Permit for  
Small Publicly Owned Wastewater Treatment Facilities  
That Discharge Treated Effluent to the Ground Water  
and the Discharge From Said Facilities

## INTRODUCTION

Pursuant to the Massachusetts Clean Waters Act, M.G.L. c. 21, s. 26-53, and the Ground Water Discharge Permitting Program Regulations, 314 CMR 5.00 (the "Ground Water Regulations"), the Department of Environmental Protection (the "Department" or "MassDEP") is issuing a general permit for small publicly owned wastewater treatment facilities (POTWs) that are designed to provide and do provide secondary treatment to less than 50,000 gallons of sewage per day (the "General Permit") and the discharge of effluent to the ground water from said facilities. This fact sheet provides the principal facts and the significant legal and policy questions considered in the development of the General Permit for such facilities. This fact sheet also identifies the type of entities eligible for coverage under the General Permit and the procedure for requesting coverage under the General Permit.

## COVERAGE OF GENERAL PERMITS

The Ground Water Regulations, 314 CMR 5.00, establish the program whereby discharges of pollutants to the ground waters of the Commonwealth are regulated by MassDEP pursuant to the Massachusetts Clean Waters Act, M.G.L. c.21, s. 43. In addition to regulating these discharges, the Massachusetts Clean Waters Act, M.G.L. c.21, s. 26 through 53, also requires that MassDEP regulate the outlets for such discharges and any treatment works associated with these discharges. Through the Ground Water Regulations, 314 CMR 5.00, MassDEP regulates the discharge of pollutants to the ground waters of the Commonwealth to protect the ground waters for use as an actual or potential drinking water source and surface waters for their existing and designated uses and to assure the attainment and maintenance of the surface water quality standards, 314 CMR 4.00.

The Ground Water Regulations, 314 CMR 5.13, authorize the issuance of general permits for one or more categories or subcategories of discharges. Pursuant to 314 CMR 5.13, MassDEP may issue a single general permit for a category of facilities whose discharges warrant similar pollution control measures because they:

1. Involve the same or substantially similar types of operations;
2. Discharge the same types of wastes;
3. Require the same effluent limitations or operating conditions;
4. Require the same or similar monitoring requirements; and

5. In the opinion of the Department, are more appropriately controlled under a general permit than under individual permits.

## BASIS FOR THE GENERAL PERMIT

Based on the factors set forth above MassDEP hereby issues the General Permit. As more fully set forth below, the General Permit is intended to cover facilities that are below the threshold established pursuant to the Massachusetts Environmental Policy Act (MEPA) for requiring an Environmental Notification Form, that discharge effluent to the ground water as a result of the secondary treatment of sewage, and that are located outside water supply protection areas and outside other sensitive environmental areas. These publicly owned facilities generally involve the same types or substantially similar types of operation, discharge the same type of wastes, and have the same potential environmental impacts. As a result, these facilities require the same type of effluent limitations, operating conditions and monitoring requirements.

MassDEP has determined that operation of such facilities in accordance with all the terms and conditions set forth in the General Permit protects the ground water as a potential source of drinking water and surface waters for their existing and designated uses. By granting coverage under the General Permit to such facilities, the Department can devote less time to permit issuance and more time to monitoring permit compliance. MassDEP has therefore concluded that such facilities are more adequately controlled under the General Permit than an individual permit.

## Eligibility

Small POTWs are eligible for coverage under the General Permit provided that all of the following conditions are met:

- The discharge is from a treatment works that:
  - Discharges effluent as the result of the secondary treatment of sewage;
  - Does not treat wastewater other than sewage; and
  - Is designed to receive and that actually receives less than 50,000 gallons of sewage per day.
- The discharge is not located within
  - The Zone I, Zone A, Zone II, or Interim Wellhead Protection Area of a public water supply;

- An area that is outside of the service area of a community public water system;
  - A sole source aquifer;
  - 100 feet of an Outstanding Resource Water designated in 314 CMR 4.00, a Special Resource Water designated in 314 CMR 4.00, a cold-water fishery as defined in 314 CMR 9.02, a bathing beach as defined in 105 CMR 445.000, or a shellfish growing area as defined in 314 CMR 9.02;
  - A nutrient sensitive environmental area as defined in 314 CMR 5.02; or
  - An area where the Department has determined based on a Total Maximum Daily Load or other technical report that more stringent effluent limits than those set forth in the General Permit are required to achieve or maintain compliance with the Massachusetts Surface Water Quality Standards, 314 CMR 4.00.
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- The discharger
    - Is a local government unit as defined in 314 CMR 5.02;
    - Pursuant to 314 CMR 5.10(9), is not requesting effluent limits different from those in the General Permit;
    - Has submitted a Hydrogeological Report that has been prepared by a Massachusetts Registered Professional Engineer with a concentration in civil, sanitary or environmental engineering in accordance with the Department's Guidelines and a scope of work approved by the Department and that includes documentation that the discharge is eligible for coverage under the General Permit set forth above;
    - Has applied for and received from the Department authorization to file a Notice of Intent requesting coverage under the General Permit; and
    - Has submitted a complete Notice of Intent requesting coverage under the General Permit.

Requirements for a Complete Notice of Intent Requesting Coverage Under the General Permit for Small Publicly Owned Wastewater Treatment Facilities and the Discharge to the Ground Water of the Effluent from Said Facilities

A complete Notice of Intent includes the following:

- Name and mailing address of contact person;
- Site address if different from mailing address;
- A description of the flows and loadings associated with the proposed wastewater treatment facility and documentation that the proposed flow will not exceed the volume specified in the Department's authorization to file a Notice of Intent requesting coverage under the General Permit, that the POTW will discharge an effluent that results from the secondary treatment of sewage, and that the facility will not treat wastewater other than sewage;
- A site plan showing the layout and major components of the wastewater treatment facility designed to provide secondary treatment for the proposed flow, the proximity to public water supply wells, private water supply wells, Outstanding Resource Waters designated in 314 CMR 4.00, Special Resource Waters designated in 314 CMR 4.00, cold-water fisheries as defined in 314 CMR 9.02, bathing beaches as defined in 105 CMR 445.000, shellfish growing areas as defined in 314 CMR 9.02, nutrient sensitive environmental areas as defined in 314 CMR 5.02, and surface waters listed on the most recent Integrated List of Impaired Waters;
- A certification from a Massachusetts Registered Professional Engineer with a concentration in sanitary, civil or environmental engineering that:
  - Construction, operation, and maintenance of the proposed wastewater treatment facility shown on the site plan in accordance with 314 CMR 5.00, 314 CMR 12.00 and the General Permit will enable the discharge to meet all the terms and conditions of the General Permit including without limitation the effluent limits set forth therein;
  - There is no information in the Hydrogeological Report submitted to the Department along with the request for authorization to file a Notice of Intent requesting coverage under the General Permit that would make the discharge ineligible for coverage under the General Permit; and

- Since the date of the authorization to file a Notice of Intent requesting coverage under the General Permit, there are no changes in the information presented in Hydrogeological Report that would make the discharge ineligible for coverage under the General Permit.
- A statement from the person requesting coverage under the General Permit that s/he will not appeal a decision denying or granting coverage under the General Permit, and that if coverage is denied, and the person requesting coverage decides to proceed with the discharge, the applicant will apply for an individual permit or coverage under an alternative general permit as directed by the Department;
- A copy of the public notice of the Department's authorization to file a Notice of Intent requesting coverage under the General Permit and the filing of the Notice of Intent that was published in a newspaper of general circulation in the municipality where the discharge is located;
- The application fee established by the Department if applicable; and
- The signature of a person specified in 314 CMR 5.14(1) along with the certification required by 314 CMR 5.14(3).

The Notice of Intent must be sent by certified mail return receipt requested to the Regional Office that issues permits for discharges located within the municipality where the permittee's discharge is located. A copy of the Notice of Intent must be sent to the Program Director, Watershed Permitting, Department of Environmental Protection, One Winter Street, 5<sup>th</sup> Floor, Boston, MA 02108.

The person requesting coverage under the General Permit is authorized to construct the wastewater treatment facility shown on the site plan and to discharge the effluent from said treatment facility to the ground water in accordance with the General Permit within forty-five (45) days of receipt of the Notice of Intent by the Department unless s/he is notified by the Department in writing that additional information is required to determine whether the proposed discharge may be adequately or appropriately covered under the General Permit and/or that s/he is required to apply for an individual permit or to request coverage under an alternative general permit.

## CONDITIONS OF THE GENERAL PERMIT

### A. Statutory and Regulatory Requirements

The Massachusetts Clean Waters Act makes it unlawful to discharge pollutants without a permit.

For dischargers not requesting special effluent limits in accordance with 314 CMR 5.10(9), the Ground Water Regulations, 314 CMR 5.10, provide that permits for the discharge to the ground of effluent that results from the secondary treatment of sewage at a wastewater treatment facility shall require the effluent to meet the more stringent of the water quality based effluent limitations defined in 314 CMR 5.10(3) and the technology based effluent limitations defined in 314 CMR 5.10(4). To assess compliance with these limits, the Ground Water Discharge Permits issued by the Department identify certain parameters that MassDEP uses to monitor compliance with the more stringent of the water quality based limits and the technology based limits. MassDEP establishes effluent limits for those parameters in accordance with 314 CMR 5.10(3) and (4), and lists these limits as special conditions in its permits. Applying this approach to the category of discharges eligible for coverage under the General Permit, the Department has determined that the following effluent limits shall be listed as special conditions in the General Permit:

Effluent Characteristic	Discharge Limitation
Biochemical Oxygen Demand (5 day at 20°C)	30 mg/l
Total Suspended Solids	30 mg/l
Nitrate Nitrogen	10 mg/l
Total Nitrogen (NO <sub>2</sub> , NO <sub>3</sub> , and TKN)	10 mg/l
Oil and Grease	15 mg/l
Chlorine Residual (if chlorine is disinfectant) <sup>1</sup>	1.0 mg/l
Surfactants	1.0 mg/l
Fecal Coliform <sup>1</sup>	200/ml/L

## MONITORING AND REPORTING REQUIREMENTS

The dischargers covered by the General Permit are required to submit to MassDEP a monthly discharge monitoring report (DMR) containing effluent and monitoring well data. Monitoring requirements have been established in 314 CMR 5.10(6) and the General Permit. It should be noted that biochemical oxygen demand, total suspended solids, nitrate nitrogen, total nitrogen, fecal coliform, surfactants, total phosphorus and orthophosphate are required to be monitored both in the effluent and the monitoring wells to evaluate any possible impacts on the waters of the Commonwealth.<sup>1</sup>

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<sup>1</sup>The effluent limits and monitoring requirements for fecal coliform are chlorine residual apply only if the effluent from the treatment works is discharged to an open sand bed prior to discharge to the ground water, i.e. effluent is spread onto the surface of a disposal area having a sand media so that the effluent may percolate through the sand media and then through the soil and

## TERM OF THE PERMIT

The General Permit is in effect for a period of five years from the date of issuance.

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unsaturated zone before entering the ground water. After one full year of monitoring Total Phosphorus and Orthophosphate, the permittee may make a written request that the monitoring required for these parameters be reduced.